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COMPARATIVE ANALYSIS OF EXTERNAL DEBT INDICATORS IN CROATIA AND SOUTHEASTERN EUROPEAN COUNTRIES[*]

Abstract

The issue of debt sustainability is the key macroeconomic question faced by country's policy makers when making important macroeconomic decisions. The problem of indebtedness in Croatia appeared after 1999 when public and external debt recorded accelerated growth rates. There is a danger of risk associated with the sources of funding that affects the apprehension about the possibility of future external debt servicing. However this is not only the specificity of the Croatian economy, because most Southeastern European transition countries were in a similar situation. The goal of the analysis is to compare the level of indebtedness in Croatia and Southeastern European countries and test the hypothesis of the paper which states that "Croatia is highly indebted country according to external debt burden and external debt flow indicators". Using comparative analysis of external debt indicators the level of indebtedness in Croatia and Southeastern European countries is compared for the year 2010. Only by analyzing a large number of external debt indicators over a longer period of time it is possible to get a clear picture about the level of country's external indebtedness. From the comparative analysis of external debt indicators in Croatia and Southeastern European countries

it can be seen that Croatia and Serbia are the most indebted countries in the region. In both countries unsustainable levels in the five indicators of external debt are present, particularly in the basic indicators; TED / Y, TED / EXP and TDS / EXP.

Keywords: external debt burden and flow indicators, Croatia, Southeastern European countries

1.   INTRODUCTION

The issue of debt sustainability is the key macroeconomic question faced by country's policy makers when making important macroeconomic decisions. The problem of indebtedness in Croatia appeared after 1999 when public and external debt recorded accelerated growth rates. Economic policy considered the problem of indebtedness sporadically, only when the ratio of external debt to gross domestic product exceeded 80%[1], approached this issue with due caution. A high ratio of external debt to gross domestic product creates great risks of exposure to international financial markets and has major implications on the sustainability of economic growth. The indicators that are commonly used in the evaluation of external indebtedness in various analyses are the ratio of external debt to gross domestic product and the ratio of external debt to exports of goods and services. However, based on only two indicators of external indebtedness, one cannot comprehensively assess country's external debt sustainability. Only by analyzing a large number of external debt indicators over a longer period of time it is possible to get a clearer picture about the level of country's external indebtedness.

External indebtedness of Croatia is a serious problem which leads to the question about sustainability of macroeconomic policies which has not been consistent and changed with each new government shift in the country. External borrowing was often used to fill the gap between the difference in the desired level of public and private consumption as opposed to the available domestic acumulation. Previous non-criterial borrowing has led to a serious restriction of development and economic policy in the country. There is a danger of risk associated with the sources of funding that affects the apprehension about the possibility of future external debt servicing. However this is not only the specificity of the Croatian economy, because in a similar situation occurred in most of the Southeastern European transition countries. The debt burden comes harder and harder to repay and the question is until when Croatia will be able to service the commitments arising from borrowings from abroad. Only with strategically guided economic policy Croatia can maintain the external debt

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[1] The critical limit that separates the group of moderate indebted countries from highly indebted countries.

sustainability and prevent the debt crisis in the situation when government can not repay the total debt service (principal and interest).

Until now a comprehensive comparative analysis of external debt burden and flow indicators for Croatia and Southeastern European countries has not been made. The goal of the paper is to calculate and explain external debt indicators for Croatia in the period between 2000 and 2010. Also using comparative analysis with Southeastern European countries for the year 2010 the level of indebtedness is compared in each of them. The hypothesis of the paper is tested using external debt assessment comparing values of external debt indicators in 2010 with critical value of external debt indicators according to the classification of the International Monetary Fund and World Bank. In chapter two the empirical literature on external debt indicators is presented, while the third chapter covers the theoretical aspects of external debt indicators. In the fourth and fifth chapters the results of the analysis for Croatia and the Southeastern European countries are presented. Final considerations and concluding remarks are given at the end of the paper.

2.   EMPIRICAL LITERATURE ON EXTERNAL DEBT INDICATORS

Several authors have contributed to the analysis of external debt indicators in Croatia and countries in the region in the last decade. Calculation and explanation of external debt burden and external debt flow indicators was done by Kačan (2000), Mihaljek (2003), Kersan-Škabić and Mihovilović (2006), Galinec (2007), Jošić (2008), Jošić and Andrijević-Matovac (2010), Bilas *et al* (2011), Jošić (2011). On the other hand, overview of key debt indicators (the ratio of external debt to gross domestic product (TED / Y), the ratio of external debt to exports of goods and services (TED / EXP) and the ratio of total debt service to exports of goods and services (TDS / EXP)) for Croatia is regularly annualy published in the reports of the Croatian National Bank (Croatian National Bank; Croatian National Bank (2006) and (2010)). Below is chronologically presented overview of economists that have contributed to the analysis of external debt indicators in Croatia and countries in the region.

Kačan (2000) analysed the structure of external debt as well as a variety of indicators of indebtedness in Croatia. In order to objectively assess the current external debt position of Croatia a comparison of external debt indicators for the four groups of countries has been made. Countries with similar current growth rates as Croatia formed the first group, the second group of countries was composed from the successor of the former Yugoslavia and the third and fourth group of countries were more and less successful transition countries. In the conclusion of the paper it is stated that "according to all observed indicators and compared to other countries and averages for groups of countries according to the

World Bank classification Croatia can not be considered a heavily indebted country".

Mihaljek (2003) analyzed the sustainability of public and external debt of Croatia with the help of standard indicators used by international financial institutions, investment banks and rating agencies. The indicators of debt sustainability for Croatia were compared with those for EU candidates from Central and Eastern Europe. He highlights several points of vulnerability. These are: high ratios of public and external debt to gross domestic product, high ratio of external debt to exports of goods and services, unfavorable currency composition of public debt, high proportion of public debt in total external debt, etc.

Kersan-Škabić and Mihovilović (2006) compared the amount and structure of Croatian external debt with the situation in Slovenia, Hungary, Czech Republic, Romania and Bulgaria. The conclusion was that external debt in Croatia has a tendency of very rapid increase; therefore the question of debt crises in Croatia is proper. The situation in Croatia is troubling because it has the greater share of external debt in import and export revenues, therefore every new debt increasing in Croatia should be limited to avoid impossibility of debt service.

Galinec (2007) calculated and explained the external debt burden and external debt flow indicators of indebtedness for Croatia in the period from 1999 to 2005. According to Galinec, given the qualitative improvement of statistical methodology on the external debt as well as the qualitative improvements of balance of payments statistics and national accounts, the resulting indicators are somewhat different in relation to the assessment of some authors from the end of 1990's.

Jošić (2008) calculated and explained the external debt indicators for Croatia from 1999 to 2006. Assesses external indebtedness of Croatia throughout indicators of indebtedness and compares basic structural indicators for Croatia and transition countries. He concludes that there is still no risk of the debt crisis because government can meet its obligations on time, but some debt indicators show a high level of indebtedness, which could lead to the insolvency of the country in international payments, which should be taken into account.

Jošić and Andrijević-Matovac (2010) assessed foreign debt sustainability in Croatia. The analysis of macroeconomic indicators explains the causes of the rapid growth of external indebtedness of Croatia after 2001. Foreign debt indicators are calculated and explained. The conclusion stated that continuation of the current trend of increase in external indebtedness is a direct path to the debt crisis.

Bilas *et al* (2011) provided an accurate and precise overview of the external indebtedness of Croatia and selected Central and Eastern Europe countries and establish limits on sustainable debt of those countries using selected indicators of external debt. A disturbing trend is a growing external indebtedness which is not accompanied by appropriate, faster growth in economic activity.

Calculated external indebtedness indicators pointed to the critical macroeconomic position of the Croatian economy.

Jošić (2011) calculated and explained the Croatian external debt burden and flow indicators for the period from 1999 to 2009. He tested the hypothesis of the dissertation which states that Croatia is heavily indebted country according to the external debt burden and flow indicators. Using the comparative analysis of external debt indicators for Croatia and Southeastern European countries he makes the comparison for countries in the year 2009. Based on the results of the analysis he partly confirms the hypothesis because by some indicators Croatia belongs to the heavily indebted countries while according to others it has not yet reached a critical level[2]. In a comparative analysis with the countries of Southeast Europe he finds that Croatia is the most indebted country in the region.

3. THEORETICAL ASPECTS OF EXTERNAL DEBT INDICATORS

External debt indicators are indicators used in the assessment and evaluation of country's external indebtedness. The basic division of debt indicators is on external debt burden indicators and external debt flow indicators. Under the classification of the International Monetary Fund and World Bank there are five external debt burden indicators and eight external debt flow indicators[3]. According to the level of external indebtedness all countries can be divided into three groups: low indebted countries, moderate indebted countries and highly indebted countries. For this purpose there are methodically specified critical levels (limits) for each indicator of indebtedness. The critical level of indicator indicates the possibility of arising problems with country's liquidity and solvency and represents the level of indebtedness after which the regular repayment of principal and interest can be hampered. Only by analyzing a large number of external debt indicators over a longer period of time it is possible to get a clearer picture about level of country's external indebtedness.

The external debt burden indicators are:

1. The ratio of external debt to gross domestic product, TED/Y

2. The ratio of external debt to exports of goods and services, TED/EXP

3. The ratio of international reserves to external debt, IR/TED

4. The ratio of short-term debt to total external debt, stD/TED

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[2] Analysis showed that Croatia is the most indebted country in eight of the thirteen debt burden and flow indicators.

[3] Babić (1997), Babić, A. and Babić, M. (2003) synthesize the external debt burden and external debt flow indicators from the World Debt Tables (WorldBank,World Debt Tables 1990-91, External Debt of Developing Countries,Vol.1. Analysis and SummaryTables, WorldBank,Washington D.C.,1990). World Debt Tables are based on the World Bank's Debtor Reporting System (DRS) found in 1951 and are the predecessor of the Global Development Finance.

5.   The ratio of multilateral debt to total external, mD/ TED

The ratio of external debt to gross domestic product, TED / Y:

The ratio of external debt to gross domestic product is one of the most important (basic) indicators of external indebtedness. This indicator is often used in empirical studies for the evaluation of external indebtedness. Since it does not say anything about the country's ability to repay the existing debt, we can make the wrong conclusions about the actual level of indebtedness. The increase in this indicator points to the potential problems of the country's solvency and possible difficulties in the future repayments of loans taken. In addition to the gross domestic product, in the denominator of this indicator is often used gross national product (GNP) which includes income receipt from the balance of payments. The ratio of external debt to gross domestic product is a structural indicator influenced by various factors: the size of the country, the level of economic development and level of economic and financial integration such as membership in a monetary union (Šonje (2007)). Lowest levels of this indicator are often present in least developed countries which were not included in globalization and integration processes and *vice versa*. The critical value of this indicator is 80%. According to the value of indicator, countries can be classified into three groups: the less indebted countries, moderately indebted countries and highly indebted countries. In relation (1) the classification of countries according to the ratio of external debt to gross domestic product under the World Bank criteria is presented:

Less indebted countries $(TED/Y \leq 48\%)$

Moderately indebted countries $(48\% < TED/Y \leq 80\%)$ (1)

Highly indebted countries $(TED/Y > 80\%)$

For this external debt indicator is very important marginal rate of debt growth in relation to the rate of growth of gross domestic product. For timely servicing of external debt economic growth rate should be higher than the growth rate of exeternal debt in the current year.

The ratio of external debt to exports of goods and services, TED/EXP:

The ratio of external debt to exports of goods and services is also one of the most important indicators of external indebtedness. It shows the external debt burden in terms of income from international trade (goods, services and transfers[4]). The increase in this indicator can cause difficulties in servicing external debt except in cases where external borrowing is used to encourage investment in export-oriented sectors of the economy. In the case when a country

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[4] It is derived indicator which includes current transfers (workers remittances and compensations from employees).

has a suficit in merchandise and trade in services and net transfers it will be easier to repay the external debt from the own funds. An increase in this indicator of external debt burden can affect country's creditworthiness. When a country has a significant inflow on the current account of balance of payments arising from workers remittances and compencations from employees from abroad, current transfers are used to calculate this indicator. In relation (2) the classification of countries according to the ratio of external debt to exports of goods and services under the World Bank criteria is presented:

$$\textit{Less indebted countries} \qquad (TED/EXP \leq 132\%)$$

$$\textit{Moderately indebted countries} \quad (132\% < TED/EXP \leq 220\%) \qquad (2)$$

$$\textit{Highly indebted countries} \qquad (TED/EXP > 220\%)$$

If the ratio of this indicator exceeds 220% country's creditworthiness is considered at risk.

<u>The ratio of international reserves to external debt, IR/TED:</u>

The ratio of international reserves to external debt shows the coverage of external debt with international reserves. The level of international reserves depends on the volume of international financial transactions, especially on the system of exchange rates and current account imbalances. Countries with fixed exchange rate regimes require a higher amount of international reserves to maintain liquidity in international transactions. The minimum level of international reserves should be at least equal to the value of three months of imports. This indicator is important when assessing the solvency and creditworthiness of the country to abroad. International reserves also serve as a tool of serving debt obligations by the government in the situation when it guarantee for domestic debtor who is not able to repay their outstanding debts. The critical value of this indicator is 20%. If the international reserves are deducted from the external debt stock net indebtedness of the country is calculated.

<u>The ratio of short-term to total external debt, st/TED:</u>

The ratio of short-term to total external debt shows the proportion of short-term debt to total external debt. Short-term debt is the debt that has an original maturity of up to one year. Countries with a sizeable proportion of short-term debt in total external debt are more sensitive to financial distress. High shares of short-term debt to total external debt indicate a reduced ability to repay debt especially if such borrowings were used for the purpose of irrational (luxury) consumption of private and public sector. In times of financial crisis there is the large fluctuations of short-term capital. This debt burden indicator is very significant because it points to the potential external vulnerability of the country and increase in the level of indicator opens questions about repayment of the

external debt in short term. Short-term borrowing is usually associated with the borrowing of the private sector of the economy, as opposed to long-term lending, which is used for the public sector investment projects. There is no critical level of this indicator. It depends on the specifics of each country as well as the total external debt measured by the ratio of external debt to GDP. Countries which have lower levels of external debt to GDP ratio can have a larger share of short term debt to total external debt, while highly indebted countries must have lower levels of this indicator in order to be able to timely service arrears.

<u>The ratio of multilateral debt to total external, mD/ TED:</u>

The ratio of multilateral debt to total external debt shows the amount of external debt to multilateral creditors. Loans granted from international financial institutions are often financially advantageous than borrowing on the international capital market. Such loans are granted with longer repayment periods and lower interest rates compared to market rates. They are very important for developing countries in financing their development projects and are often granted because due to current account imbalances and difficulties in servicing external debt.

The external debt flow indicators are:

1. The ratio of total debt service to exports of goods and services, TDS/EXP

2. The ratio of annual interest payments to exports of goods and services, INT/EXP

3. The ratio of principal repayments to disbursements, PR/DISB

4. The ratio of international reserves to total debt service, RTDSR

5. The ratio of net financial transfers to imports of goods and services, NFT/IMP

6. The ratio of net financial transfers to gross domestic product, NFT/Y

7. The ratio of disbursements to imports of goods and services, DISB/IMP

8. The ratio of annual interest payments to gross domestic product, INT/Y

<u>The ratio of total debt service to exports of goods and services, TDS/EXP:</u>

The ratio of total debt service to exports of goods and services shows the total burden of debt service (principal and interest) in relation to the exports of goods and services (plus current transfers). It is one of the most important external debt flow indicators and is most commonly used when evaluating debt repayment and serviceability of debt obligations of the country. Total debt service only includes the values of totally payed debt and do not include the contracted amounts of principal and interest. If the growth rate of current debt liabilities is

greater than the rate of growth of exports of goods and services (including the balance of current transfers) external debt time-path is not sustainable. Countries that have significant inflows of net transfers from abroad (foreign exchange remittances, humanitarian aids, gifts and grants) need to include net transfers in the calculation of this indicator. A critical level of this indicator is 30%, and if we include net transfers into equation critical level of the indicator is somewhat lower, at 20%. In the case when the value of indicator goes below the critical limits then the problems with illiquidity in international payments may arise.

The ratio of annual interest payments to exports of goods and services, INT/EXP:

The ratio of annual interest payments to exports of goods and services shows the share of revenue from exports of goods and services that should be set aside for payment of interest on external debt. In the case when the growth rate of exports of goods and services is greater than the average interest rate on external borrowing, there will be fall in indicator, and *vice versa*. Use of this external debt flow indicator is very important when evaluating external debt of highly indebted countries which reschedule its debts, so you can say that it is the measure of the cost from borrowing abroad. The critical value of this indicator is 20%. In the case when the value of indicator exceeds the critical limit, the problems with illiquidity and unsolvency in international payments may arise.

The ratio of principal repayments to disbursements, PR/DISB:

The ratio of principal repayments to disbursements shows the relationship between payments of principal for total external debt to the use of new loans in the current year. In the case when disbursements are larger than the repayment of principal on external debt, the amount of external debt is growing and revolving. Critical level of this indicator is 40% and the decline in the indicator below this level indicates a reduction in the repayment of principal in respect of the use of new loans. This implies that the borrowed funds were not used for the purpose to encourage investment in the production and export sectors of the economy or for the purpose of repayment exernal debt burden.

The ratio of international reserves to total debt service, RTDSR:

The ratio of international reserves to total debt service shows how many months will be able to service the debt using the available level of international reserves. It is a measure of country's external liquidity, and is calculated using the following equation (3):

$$RTDSR = \frac{IR}{\frac{TDS}{12}} \Rightarrow \frac{IR*12}{TDS} \tag{3}$$

This indicator is calculated as the ratio of international reserves with regard to the total debt service divided by twelve (number of months). There is no critical value of this indicator specified by the IMF and World Bank, but the countries external position can be vulnerable if the value of indicator drops below 12 (the amount of international reserves is not enough to finance total debt service for one year).

The ratio of net financial transfers to imports of goods and services, NFT/IMP:

The ratio of net financial transfers to imports of goods and services shows the net amount of borrowed funds used to finance imports after repayment of the principal. The value of net financial transfers is thereby equal to disbursement in current year minus repayment of principal on external debt. The critical level of this indicator is 3% since the new loans should be used for the purpose of repayment (refinancing) the principal on external debt. In the case with negative net financial transfers, new usages are less than principal repayment on external debt and cannot finance additional imports.

The ratio of net financial transfers to gross domestic product, NFT/Y:

The ratio of net financial transfers to gross domestic product shows the relationship between net funding received from abroad (the difference between the use of new loans and the repayment of principal on the external debt) and gross domestic product. This indicator shows the contribution of net financial transfers from abroad to a process of economic development in a country debtor. The lack of domestic accumulation in regard to required investments leads to a greater need for foreign funding, which leads to an increase in the level of indicator. There is no critical value of this indicator specified by the IMF and World Bank, but the country's external position can be vulnerable if the value of indicator exceeds 1,5% (author's estimates).

The ratio of disbursements to imports of goods and services, DISB/IMP:

The ratio of disbursements to imports of goods and services shows the proportion of total imports financed by foreign loans. Country's dependence on foreign loans in the financing of imports of goods and services leads to an increase in the level of this indicator. The critical value of the indicator is in the range of 16-28% which depends on the specifics of each country.

The ratio of annual interest payments to gross domestic product, INT/Y:

The ratio of annual interest payments to gross domestic product shows the amount of the gross domestic product used for the payment of interests on external debt. In the case when the annual interest growth rate on external debt exceeds the growth rate of gross domestic product, external debt time-path is not sustainable which ultimately leads to a slowdown in economic activity. The critical level of this indicator is 3%.

4.   ANALYSIS OF EXTERNAL DEBT INDICATORS IN CROATIA

In tables 1 and 2 (in Appendix) the calculated external debt burden and external debt flow indicators for Croatia in the period between 2000 and 2010 are presented. In Table 5 (in Appendix) are also presented critical values of external debt indicators. Data in tables are expressed in millions of euros (EUR) and percentages.

The scientific problem of the paper can be stated as follows:

H1… Croatia is highly indebted country according to the external debt burden and external debt flow indicators

Hypothesis 1 will be tested by comparing calculated external debt burden and flow indicators for Croatia and the countries of Southeastern Europe in the year 2010 with critical levels of debt indicators according to the criteria of IMF and the World Bank.

From table 1 it can be seen that there was a strong rise in the ratio of external debt to gross domestic product (TED/Y) which increased from 53,0% in 2000 to 101,3% in 2010 as a result of faster growth in foreign borrowings with regard to the increase in gross domestic product. In the year 2010 Croatia had a higher amount of gross external debt than the gross domestic product, so the value of the indicator exceeded 100%. If we closely look at the World Bank and IMF criteria for classification of countries according to external indebtedness, Croatia had in 2008 joined the group of highly indebted countries since the value of the indicator exceeded the critical limit of 80% and amounted to 85,0%.

The ratio of external debt to exports of goods and services, TED/EXP also increased sharply during the observed period. The value of this indicator in 2000 amounted to 130,2%, in order to increase to 264,3% in 2010. In the period between 2000 and 2002 the value of the indicator stagnated, while since 2002 is present significant continued growth. The increase was particularly expressed in 2009 when the index value increased from 203,9% to the highest level of 280,0%. According to this external debt burden indicator Croatia joined the group of highly indebted countries in 2009. Since Croatia is a recipient of the current transfers from abroad, adding the current transfers to the value of exports of goods and services the indicator TED/EXP_1 is derived. The value of this indicator is slightly lower than the value of TED/ EXP but it does not significantly affect the assessment of external indebtedness using the criteria of the World Bank. This indicator value in 2010 was 241,2% which also indicates that the creditworthiness of the country is violated.

The ratio of international reserves to external debt, IR/TED is relatively stable throughout the observed period. If we look at the trend of the indicator after the 2000 it is indicative to have a slight downward trend, but did not exceed the critical limit of indebtedness. The value of indicator in 2000 was 30,8%, the highest level reached in 2001 with 39,2%, while in 2010 it amounted to 22,9%, which is only slightly above the critical level of 20%. While international

reserves rose steadily from the year 2000 (except for the 2004 when there was a slight decline) the value of indicator did not increase due to greater growth rate of external debt.

The ratio of short-term debt to total external debt, stD/TED in 2000 amounted to 8,0%, in 2002 fell to its lowest level of 3,8%, but since then continued to rise to its highest level of 15,2% in 2008. The value of indicator in 2010 was 12,2%. This indicator is important because it assesses the country's vulnerability to external financial disturbances and its increase may cause uncertainty about short-term debt repayment. Countries that have higher levels of indicator TED/Y, according to the unwritten rule, should have lower levels of short-term debt to total external debt. Croatia is still in no danger concerning this debt indicator. However, one should take into account the maturity structure of external debt, otherwise it may cause difficulty in repayment.

The ratio of multilateral debt to total external debt, mD/ TED decreased throughout the observed period except for a slight increase in 2010 when it stood at 10,5%. Whereas in 2000 it amounted to 20,1%, in 2009 has fallen to a level of 9,0% despite an increase in the nominal value of multilateral debt in relation to the year 2000. According to this indicator Croatia is in no danger of over-indebtedness.

The ratio of total debt service to exports of goods and services, TDS/EXP in 2000 amounted to 30,5%. After the 2000 Croatia had a level of indicator TDS / EXP slightly above the critical level (except for the year 2003 and 2004) while after the 2008 there was a sudden increase in indicators value from 37,1% to 64,6% in 2009. In 2010 the value od indicator amounted to 63,9%. If we take into account the net transfers from abroad we get the indicator TDS/EXP_1. Values of this debt flow indicator were slightly lower compared to the fundamental indicator. According to the ratio of total debt service to exports of goods and services Croatia is heavily indebted country because the values of indicators exceed the critical limit of 30%. The reason for that are both drastic decline in exports of goods and services and an increase in total debt service (primarily through the increase in the principal of external debt).

The ratio of annual interest payments to exports of goods and services, INT/EXP increased from 5,5% in 2000 to 7,7% in 2009, but the values of indicator were within the critical limits of indebtedness. In 2010 the value of indicator was 7,6%. If we take into account the net transfers from abroad we get the indicator INT/EXP_1. Values of this debt flow indicator were slightly lower compared to the fundamental indicator.

The ratio of principal repayments to disbursements, PR/DISB has increased from 53,4% min 2000 to 96,8% in 2010. Indicator values were lower than 100% in the observed period which implies that the usages of new loans were higher than the principal repaymenst on external debt and the amount of external debt has steadily increased (revolved). According to this indicator Croatia is in no danger of over-indebtedness. The critical limit of 40% was broken only in 2003 when the value of the indicator fell to 37,0%.

The ratio of international reserves to total debt service, RTDSR shows how many months could be debt (principal and interest) repayed using country's international reserves. The value of the indicator in 2000 was 15,8, then grew to 22,6 in 2003 when the international reserves of the country could repay current total debt service for 22,6 months. After the 2003 there was a decrease in indicator which in late 2010 amounted to the lowest value of 11,4. There is no certain limit under the classification of WB/IMF which can said when the value of indicator is unsustainable but problems can arise if the value of the indicator falls below the value of 12 (author's estimate) respectively international reserves could not cover one year of total debt service.

The ratio of net financial transfers to imports of goods and services, NFT/IMP was very high throughout the observed period except in 2010. Croatia had unsustainable level of indicator which explains the excessive use of net funds borrowed to finance the country's imports. In 2000 it amounted to 19,8%, the highest value of indicator was 33,3% in 2003 and in 2009 it accounted to 24,2% which several times exceeds the critical level of indicator of 3%. In 2010 the value of indicator 1,8% was within sustainable limits primarily due to reduction in the use of new disbursements iwith regard to the debt principal repayments.

The ratio of net financial transfers to gross domestic product, NFT/Y was also very high due to the significant level of net borrowings from abroad except in the year 2010. Since 2004 the value of the indicator has been stable at around 10% and has not increased until the 2010 when it dropped to only 0.7% which is less than the critical limit estimated on 1,5%. The sharp fall in value of indicator in 2010 was a result of decreased new loans to finance imports of the country.

The ratio of disbursements to imports of goods and services, DISB/IMP was 42,5% in 2000, until the 2009 it has been volatile, but it was not significantly changed. In 2009 there was a rise in this indicator value which amounted to 75,8% well above the critical level of indicator ranged from 16 to 28%. In 2010 the value of indicator was slightly lower at 57,9% due to decrease in new borrowings from abroad. According to this indicator of external debt flow Croatia is heavily indebted country. The ratio of annual interest payments to gross domestic product, INT/Y amounted to 2,9% and reached its highest level in 2010 which is still below the critical limit of 3%. According to this indicator, there is still no danger of insolvency in international payments.

5.   COMPARATIVE ANALYSIS OF EXTERNAL DEBT INDICATORS IN CROATIA AND SOUTHEASTERN EUROPEAN COUNTRIES

Using comparative analysis of external debt indicators the level of indebtedness in Croatia and Southeastern European countries is compared for the year 2010. After calculating the value of indicators in 2010 it is then compared to

the critical level of indicators according to the criteria of IMF and the World Bank. The analysis included countries from Southeastern Europe excluding Kosovo and Montenegro because of insufficient data. The goal of the analysis is to compare the level of indebtedness in Croatia and Southeastern European countries and test the hypothesis of the paper. Sources of data used in the analysis were downloaded from the Global Development Finance, Global Watch, EUROSTAT and the Croatian National Bank. Data available from the Global Development Finance were stated in millions of dollars. Data were transformed by conversion rate for euros (EUR) using official exchange rate dollar / euro on December 31, 2010. Variables of interest were gross external debt, exports of goods and services (plus current transfers), imports of goods and services, international reserves, short-term external debt, multilateral debt, disbursements and total debt service (principal plus interest). In tables 3 and 4 (in Appendix) calculated indicators of external debt burden and external flow for Southeastern European countries for 2010 are presented. In Table 5 the critical value of external debt indicators is also presented. Data in the tables are expressed in millions of euros (EUR) and percentages.

If we look at the ratio of external debt to gross domestic product TED/Y it can be seen that the group of highly indebted countries is led by Croatia with the indicator value of 101,3%, followed by Bulgaria with 99,0% and Serbia with 80,3%. In the group of moderately indebted countries are Moldova, Romania, Macedonia and Bosnia and Herzegovina while in the group of the least indebted countries are Albania and Turkey with the indicator value of 39,9%. In the group of highly indebted countries in relation to the indicator of external debt to exports of goods and services, TED/EXP belongs to Croatia with the highest indicator value of 267,3% and Serbia with 237,6%. In the group of moderately indebted countries are all other remaining countries: Romania, Moldova, Turkey, Bulgaria, Albania, Bosnia and Herzegovina and Macedonia. If we take into account the net transfers from abroad we get the indicator TDS/EXP$_1$. In this case only Croatia remains in the group of highly indebted countries with indicator value of 241,2% while in the group of the least indebted countries on this indicator of indebtedness belong Moldova, Macedonia, Bosnia and Herzegovina and Albania with indicator value of only 101,6%.

According to the ratio of international reserves to external debt, IR/TED no country has the critical value of indicator below 20%. Croatia is, however, dangerously close to the critical limit with level of indicator of only 22,9%. The highest ratio of short-term debt to total external debt, stD/TED has Macedonia with 35,4%, Moldova 33,9% and Bulgaria with 32,0%. Bulgaria is the most vulnerable in terms of this indicator because it has a high level of external debt to gross domestic product. Countries with the least proportion of short-term debt to total external debt are Croatia, Bosnia and Herzegovina, Albania and Serbia, with only 8,7%. According to the ratio of multilateral debt to total external, mD/TED the highest proportion of external debt obligations to multilateral creditors goes to Albania with 32,1% and Bosnia and Herzegovina with 28,6%. On the other side,

the smallest proportion of external debt obligations to multilateral creditors belongs to Croatia with 10,5%, Turkey 6,7% and Bulgaria 4,8%.

Croatia is the most indebted country according to the ratio of total debt service to exports of goods and services, TDS/EXP with a share of 63,9%. Slightly above the critical level of 30% of the indicators are still Turkey, Serbia and Romania, while all other countries have a sustainable repayment of principal and interest in regard of exports of goods and services. If in the analysis are included net transfers then Croatia and Turkey still have the largest proportion shares of total debt service to exports of goods and services. No country exceeds the critical limit of indebtedness relative to annual interest payments on external debt and exports of goods and services INT / EXP. The highest share of interest payments on external debt to exports of goods and services have Croatia with 7,6%, Serbia and Turkey both with 5,6%. The indicator values INT/EXP_1 are slightly lower than the value of the indicator INT / EXP. From the ratio of principal repayments to disbursements, PR/DISB no country is located below a critical limit of indicator. Albania is the closest to a critical level, with a share of 45,9%, while the highest ratio of principal repayments to disbursements have Bulgaria with 225,5% and Bosnia and Herzegovina with 211,2%.

According to the ratio of international reserves to total debt service, RTDSR Croatia and Turkey has the lowest level of indicator with 11,4 and 19,2. On the other side, Albania, Moldova and Bosnia and Herzegovina have the highest value of indicator. Albania has a highest ratio of net financial transfers to imports of goods and services, NFT/IMP with indicator value of 7,3%, which exceeds the critical level of indicator of 3%, followed by Serbia with 5,5% and Moldova with 3,5%. In the case of Bulgaria and Bosnia and Herzegovina the value of indicator is negative which means that the new usages of financial transfers were less than principal payments in the current year. Albania, Serbia and Moldova also have the highest levels of indicator NFT / Y with unsustainable time-paths, while the negative values of indicator were present in Bulgaria and Bosnia and Herzegovina. When looking at the ratio of disbursements to imports of goods and services, DISB/IMP Croatia with 57,9% is above the critical level of indicators. Within the permissible range of indicator (16-28%) has been settled in Romania, Turkey and Serbia, while Moldova, Macedonia and Bosnia and Herzegovina have the lowest level of indicator. No country is in danger according to the ratio of annual interest payments to gross domestic product, INT/Y but Croatia is dangerously close to the critical limit with indicator value of 2,9%. From the comparative analysis of external debt indicators in Croatia and Southeastern European countries it can be seen that Croatia and Serbia are the most indebted countries in the region. In both countries are present unsustainable levels in the five indicators of external debt, particularly in the basic indicators; TED / Y, TED / EXP and TDS / EXP. Moldova and Albania have unsustainable levels of external debt in two indicators: NFT / IMP and NFT / Y due to significant disbursements that have not been used for the repayment of principal on external debt. Bulgaria, Romania and Turkey have unsustainable level of

external debt only in one indicator; in Bulgaria it is TED / Y while in Romania and Turkey it is TDS / EXP. Bosnia and Herzegovina and Macedonia are in the group of moderately indebted countries and are in no danger according to any external debt indicators. Based on the results of the analysis the hypothesis of the paper can be partialy confirmed because by some indicators Croatia belongs to the heavily indebted countries while according to others it has not yet reached a critical level.

6.   CONCLUSION

External debt indicators are indicators used in the assessment and evaluation of country's external indebtedness. Only by analyzing a large number of external debt indicators over a longer period of time it is possible to get a clearer picture about level of country's external indebtedness. Several authors have contributed to the analysis of external debt indicators in Croatia and countries in the region in the last decade. Calculation and explanation of external debt burden and external debt flow indicators were done by Kačan (2000), Mihaljek (2003), Kersan-Škabić and Mihovilović (2006), Galinec (2007), Jošić (2008), Jošić and Andrijević-Matovac (2010), Bilas *et al* (2011), Jošić (2011). Until now there was no comprehensive comparative analysis of external debt burden and flow indicators for Croatia and Southeastern European countries.

Using comparative analysis of external debt indicators the level of indebtedness in Croatia and Southeastern European countries is compared in the year 2010. After calculating the value of the indicators in 2010 it is then compared to the critical level of these indicators according to criteria of the IMF and the World Bank. From the comparative analysis of external debt indicators in Croatia and Southeastern European countries it can be seen that Croatia and Serbia are the most indebted countries in the region. In both countries unsustainable levels in the five indicators of external debt are present, particularly in the basic indicators; TED / Y, TED / EXP and TDS / EXP. Moldova and Albania have unsustainable levels of external debt in two indicators: NFT / IMP and NFT / Y due to significant disbursements that have not been used for the repayment of principal on external debt. Bulgaria, Romania and Turkey have unsustainable level of external debt only in one indicator; in Bulgaria it is TED / Y while in Romania and Turkey it is TDS / EXP. Bosnia and Herzegovina and Macedonia are in the group of moderately indebted countries and are in no danger according to any external debt indicator. Based on the results of the analysis the hypothesis of the paper can be partialy confirmed because by some indicators Croatia belongs to the heavily indebted countries while according to others it has not yet reached a critical level.

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APPENDIX

Table 1

External debt burden indicators for Croatia (2000-2010)

in mil. EUR and %	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total external debt (TED)	12.263,6	13.609,3	15.144,0	19.883,9	22.933,4	25.990,0	29.725,0	33.721,0	40.590,0	45.244,0	46.493,7
GDP (Y)	23.146,0	25.738,0	28.189,0	30.265,0	33.009,0	36.034,0	39.745,0	43.390,0	47.765,0	45.669,0	45.917,0
Exports of goods and services (EXP)	9.418,5	10.808,8	11.127,9	13.140,6	14.243,5	15.272,9	16.990,4	18.307,2	19.904,6	16.157,1	17.591,8
Exports of goods and services + workers rem. and comp. of emp. (EXP1)	10.614,0	12.142,0	12.581,1	14.679,3	15.828,1	16.901,3	18.629,9	19.883,3	21.589,0	17.764,9	19.276,4
International reserves (IR)	3.783,2	5.333,6	5.651,3	6.554,1	6.436,2	7.438,4	8.725,3	9.307,4	9.120,9	10.375,8	10.660,0
Short-term external debt (stD)	976,9	593,1	579,1	1.608,1	2.634,0	3.393,9	4.301,3	4.387,4	6.172,2	4.830,7	6.019,7
Multilateral debt (mD)	2.468,3	2.577,6	2.544,8	2.711,8	3.011,9	3.226,0	3.395,1	3.455,5	3.800,3	4.071,7	4.888,1
External debt burden indicators											
TED/Y	53,0%	52,9%	53,7%	65,7%	69,5%	72,1%	74,8%	77,7%	85,0%	99,1%	101,3%
TED/EXP	130,2%	125,9%	136,1%	151,3%	161,0%	170,2%	175,0%	184,2%	203,9%	280,0%	264,3%
TED/EXP1	115,5%	112,1%	120,4%	135,5%	144,9%	153,8%	159,6%	169,6%	188,0%	254,7%	241,2%
IR/TED	30,8%	39,2%	37,3%	33,0%	28,1%	28,6%	29,4%	27,6%	22,5%	22,9%	22,9%
stD/TED	8,0%	4,4%	3,8%	8,1%	11,5%	13,1%	14,5%	13,0%	15,2%	10,7%	12,9%
mD/TED	20,1%	18,9%	16,8%	13,6%	13,1%	12,4%	11,4%	10,2%	9,4%	9,0%	10,5%

Source: Croatian National Bank, Croatian Bureau of Statistics and author's calculations

Table 2

External debt flow indicators for Croatia (2000-2010)

in mil. EUR and %	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Disbursements (DISB)	4.424,2	5.100,5	5.518,4	7.982,5	6.913,4	6.851,7	10.700,4	10.740,4	11.104,0	13.481,0	10.228,7
Total debt service (principal+interest) (TDS)	2.876,5	4.234,8	3.526,5	3.479,7	4.055,3	4.738,9	7.405,6	7.147,8	7.380,1	10.432,9	11.239,3
Principal repayments (PR)	2.361,4	3.615,8	3.003,9	2.953,1	3.492,7	4.054,8	6.580,7	6.186,8	6.106,6	9.187,6	9.906,3
Interest payments (INT)	515,1	619,0	522,7	526,6	562,6	684,1	824,8	961,0	1.273,5	1.245,3	1.333,0
Net financial transfers (disbursements - principal repayments) (NFT)	2.062,8	1.484,7	2.514,5	5.029,4	3.420,7	2.796,9	4.119,6	4.553,6	4.997,4	4.293,4	322,5
Exports of goods and services (EXP)	9.418,5	10.808,8	11.127,9	13.140,6	14.243,5	15.272,9	16.990,4	18.307,2	19.904,6	16.157,1	17.591,8
Exports of goods and services + workers rem. and comp. of emp. (EXP1)	10.614,0	12.142,0	12.581,1	14.679,3	15.828,1	16.901,3	18.629,9	19.883,3	21.589,0	17.764,9	19.276,4
Imports of goods and services (IMP)	10.403,0	12.056,3	13.748,6	15.123,9	16.136,5	17.409,1	19.558,4	21.374,6	23.623,8	17.774,1	17.657,4
Imports of goods (IMPm)	8.468,6	9.922,6	11.253,5	12.545,9	13.330,9	14.738,3	16.807,8	18.626,5	20.607,8	15.090,1	15.054,3
International reserves (IR)	3.783,2	5.333,6	5.651,3	6.554,1	6.436,2	7.438,4	8.725,3	9.307,4	9.120,9	10.375,8	10.660,0
GDP (Y)	23.146,0	25.738,0	28.189,0	30.265,0	33.009,0	36.034,0	39.745,0	43.390,0	47.765,0	45.669,0	45.917,0
External debt flow indicators											
TDS/EXP	30,5%	39,2%	31,7%	26,5%	28,5%	31,0%	43,6%	39,0%	37,1%	64,6%	63,9%
TDS/EXP1	27,1%	34,9%	28,0%	23,7%	25,6%	28,0%	39,8%	35,9%	34,2%	58,7%	58,3%
INT/EXP	5,5%	5,7%	4,7%	4,0%	3,9%	4,5%	4,9%	5,2%	6,4%	7,7%	7,6%
INT/EXP1	4,9%	5,1%	4,2%	3,6%	3,6%	4,0%	4,4%	4,8%	5,9%	7,0%	6,9%
PR/DISB	53,4%	70,9%	54,4%	37,0%	50,5%	59,2%	61,5%	57,6%	55,0%	68,2%	96,8%
RTDSR	15,8	15,1	19,2	22,6	19,0	18,8	14,1	15,6	14,8	11,9	11,4
NFT/IMP	19,8%	12,3%	18,3%	33,3%	21,2%	16,1%	21,1%	21,3%	21,2%	24,2%	1,8%
NFT/Y	8,9%	5,8%	8,9%	16,6%	10,4%	7,8%	10,4%	10,5%	10,5%	9,4%	0,7%
DISB/IMP	42,5%	42,3%	40,1%	52,8%	42,8%	39,4%	54,7%	50,2%	47,0%	75,8%	57,9%
INT/Y	2,2%	2,4%	1,9%	1,7%	1,7%	1,9%	2,1%	2,2%	2,7%	2,7%	2,9%
NFT/IMPm	24,4%	15,0%	22,3%	40,1%	25,7%	19,0%	24,5%	24,4%	24,3%	28,5%	2,1%
DISB/IMPm	52,2%	51,4%	49,0%	63,6%	51,9%	46,5%	63,7%	57,7%	53,9%	89,3%	67,9%

Source: Croatian National Bank, Croatian Bureau of Statistics and author's calculations

Table 3

External debt burden indicators for Southeastern European countries (2010)

in mil. EUR and %	Croatia	Serbia	Bosnia and Herzegovina	Macedonia, FYR	Bulgaria	Romania	Albania	Moldova	Turkey
Total external debt (TED)	46.493,7	24.227,0	6.358,6	4.363,9	36.148,1	91.357,1	3.560,9	3.469,9	220.956,4
GDP (Y)	45.917,0	30.172,0	12.654,1	6.848,1	36.517,3	121.113,0	8.851,8	4.368,4	553.254,1
Exports of goods and services (EXP)	17.591,8	10.195,0	4.757,9	3.286,2	20.697,8	44.043,3	2.637,0	1.723,3	116.727,2
Exports of goods and services + workers rem. and comp. of emp. (EXP1)	19.276,4	12.715,0	6.190,2	3.577,9	21.740,6	46.962,8	3.506,2	2.753,4	117.384,4
International reserves (IR)	10.660,0	10.006,0	3.295,5	1.712,0	12.949,6	36.126,3	1.910,5	1.291,7	64.630,8
Short-tem external debt (stD)	6.019,7	2.103,8	782,1	1.544,8	11.567,4	18.819,6	430,8	1.176,3	58.774,4
Multilateral debt (mD)	4.888,1	3.645,1	1.818,5	837,8	1.735,1	10.049,3	1143,1	416,4	14.804,0
External debt burden indicators									
TED/Y	101,3%	80,3%	50,2%	63,7%	99,0%	75,4%	40,2%	79,4%	39,9%
TED/EXP	264,3%	237,6%	133,6%	132,8%	174,6%	207,4%	135,0%	201,4%	189,3%
TED/EXP1	241,2%	190,5%	102,7%	122,0%	166,3%	194,5%	101,6%	126,0%	188,2%
IR/TED	22,9%	41,3%	51,8%	39,2%	35,8%	39,5%	53,7%	37,2%	29,3%
stD/TED	12,9%	8,7%	12,3%	35,4%	32,0%	20,6%	12,1%	33,9%	26,6%
mD/TED	10,5%	15,0%	28,6%	19,2%	4,8%	11,0%	32,1%	12,0%	6,7%

Source: CNB, Global Development Finance 2012, Economy Watch, EUROSTAT and author's calculations

Table 4

External debt flow indicators for Southeastern European countries (2010)

in mil. EUR and %	Croatia	Serbia	Bosnia and Herzegovina	Macedonia, FYR	Bulgaria	Romania	Albania	Moldova	Turkey
Disbursements (DISB)	10.228,7	3.454,1	401,5	433,1	1.127,1	13.094,7	620,3	345,1	34.961,60
Total debt service (principal+interest) (TDS)	11.239,3	3.150,4	981,2	433,8	2.969,2	13.460,1	342,7	260,1	40.340,60
Principal repayments (PR)	9.906,3	2.579,7	848,1	342,1	2.542,1	11.837,6	284,8	224,8	33.846,60
Interest payments (INT)	1.333,0	570,7	133,1	91,7	427,1	1.622,5	57,9	35,3	6.494,00
Net financial transfers (disbursements - principal repayments) (NFT)	322,5	874,4	-446,6	91,0	-1.415,0	1.257,1	335,5	120,3	1.115,00
Exports of goods and services (EXP)	17.591,8	10.195,0	4.757,9	3.286,2	20.697,8	44.043,3	2.637,0	1.723,3	116.727,2
Exports of goods and services + workers rem. and comp. of emp. (EXP1)	19.276,4	12.715,0	6.190,2	3.577,9	21.740,6	46.962,8	3.506,2	2.753,4	117.384,4
Imports of goods and services (IMP)	17.657,4	16.009,6	7.382,5	4.605,5	21.380,8	50.466,2	4.579,7	3.416,1	147.275,90
International reserves (IR)	10.660,0	10.006,0	3.295,5	1.712,0	12.949,6	36.126,3	1.910,5	1.291,7	64.650,8
GDP (Y)	45.917,0	30.172,0	12.654,1	6.848,1	36.517,3	121.113,0	8.851,8	4.368,4	553.254,1
External debt flow indicators									
TDS/EXP	63,9%	30,9%	20,6%	13,2%	14,3%	30,6%	13,0%	15,1%	34,6%
TDS/EXP1	58,3%	24,8%	15,9%	12,1%	13,7%	28,7%	9,8%	9,4%	34,4%
INT/EXP	7,6%	5,6%	2,8%	2,8%	2,1%	3,7%	2,2%	2,0%	5,6%
INT/EXP1	6,9%	4,5%	2,2%	2,6%	2,0%	3,5%	1,7%	1,3%	5,5%
PR/DISB	96,8%	74,7%	211,2%	79,0%	225,5%	90,4%	45,9%	65,1%	96,8%
RTDSR	11,4	38,1	40,3	47,4	52,3	32,2	66,9	59,6	19,2
NFT/IMP	1,8%	5,5%	-6,0%	2,0%	-6,6%	2,5%	7,3%	3,5%	0,8%
NFT/Y	0,7%	2,9%	-3,5%	1,3%	-3,9%	1,0%	3,8%	2,8%	0,2%
DISB/IMP	57,9%	21,6%	5,4%	9,4%	5,3%	25,9%	13,5%	10,1%	23,7%
INT/Y	2,9%	1,9%	1,1%	1,3%	1,2%	1,3%	0,7%	0,8%	1,2%

Source: CNB, Global Development Finance 2012, Economy Watch, EUROSTAT and author's calculations

Table 5

External debt assessment under critical value of external debt indicators for Southeastern European

External debt indicator	Critical value	Croatia	Serbia	Bosnia and Herzegovina	Macedonia, FYR	Bulgaria	Romania	Albania	Moldova	Turkey
TED/Y	>80%	101,3%	80,3%	50,2%	63,7%	99,0%	75,4%	40,2%	79,4%	39,9%
TED/EXP	>220%	264,3%	237,6%	133,6%	132,8%	174,6%	207,4%	135,0%	201,4%	189,3%
IR/TED	<20%	22,9%	41,3%	51,8%	39,2%	35,8%	39,5%	53,7%	37,2%	29,3%
srD/TED	-	12,9%	8,7%	12,3%	35,4%	32,0%	20,6%	12,1%	33,9%	26,6%
mD/TED	-	10,5%	15,0%	28,6%	19,2%	4,8%	11,0%	32,1%	12,0%	6,7%
TDS/EXP	>30%	63,9%	30,9%	20,6%	13,2%	14,3%	30,6%	13,0%	15,1%	34,6%
INT/EXP	>20%	7,6%	5,6%	2,8%	2,8%	2,1%	3,7%	2,2%	2,0%	5,6%
PR/DISB	<40%	96,8%	74,7%	211,2%	79,0%	225,5%	90,4%	45,9%	65,1%	96,8%
R/TDSR	<12*	11,4	38,1	40,3	47,4	52,3	32,2	66,9	59,6	19,2
NFT/IMP	>3%	1,8%	5,5%	-6,0%	2,0%	-6,6%	2,5%	7,3%	3,5%	0,8%
NFT/Y	>1,5%*	0,7%	2,9%	-3,5%	1,3%	-3,9%	1,0%	3,8%	2,8%	0,2%
DISB/IMP	>16-28%	57,9%	21,6%	5,4%	9,4%	5,3%	25,9%	13,5%	10,1%	23,7%
INT/Y	>3%	2,9%	1,9%	1,1%	1,3%	1,2%	1,3%	0,7%	0,8%	1,2%

Source: IMF, World Bank and author's calculations
* author's estimate

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KOMPARATIVNA ANALIZA POKAZATELJA INOZEMNE ZADUŽENOSTI REPUBLIKE HRVATSKE I ZEMALJA JUGOISTOČNE EUROPE*

Sažetak

Održivost duga je ključno makroekonomsko pitanje s kojim se suočavaju kreatori državne politike prilikom donošenja važnih makroekonomskih odluka. Problem zaduženosti u Hrvatskoj javlja se nakon 1999. kada javni i inozemni dug bilježe ubrzanu stopu rasta. Postoji rizik vezan uz izvore financiranja koji utječe na strepnju o mogućnosti budućeg serviziranja inozemnog duga. Ipak, ovo nije specifično samo za hrvatsko gospodarstvo jer je većina tranzicijskih zemalja Jugoistočne Europe bila u sličnoj situaciji. Cilj analize je usporediti razinu zaduženosti u Hrvatskoj i zemljama Jugoistočne Europe i ispitati hipotezu: „Hrvatska spada u visoko zadužene zemlje prema teretu otplate inozemnog duga i pokazateljima tijeka inozemne zaduženosti“. Koristeći komparativnu analizu pokazatelja inozemne zaduženosti, uspoređuje se razina zaduženosti u Hrvatskoj i zemljama Jugoistočne Europe iz 2010. godine. Samo analizom velikog broja pokazatelja inozemne zaduženosti tijekom duljeg razdoblja moguće je dobiti jasnu sliku inozemne zaduženosti. Komparativna analiza pokazatelja inozemne zaduženosti Hrvatske i zemalja Jugoistočne Europe pokazuje da su Hrvatska i Srbija najzaduženije u regiji. U obje zemlje prisutne su neodržive razine u svih pet pokazatelja inozemne zaduženosti, posebno u temeljnim pokazateljima: TED / Y, TED / EXP i TDS / EXP.

***Ključne riječi:** teret inozemnog duga i pokazatelji tijeka, Hrvatska, zemlje Jugoistočne Europe.*

***JEL klasifikacija:** E60, F34, H63*